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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-----------------------|---------------------|------------------|
| 10/697,738 | 10/30/2003 | Charles Dudley Copper | 18094 | 9052 |

7590 10/05/2005

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| EXAMINER |
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VU, HIEN D

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| ART UNIT | PAPER NUMBER |
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2833

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/697,738

Applicant(s)

COPPER ET AL.

Examiner

Hien D. Vu

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,8-10,12,14-17,19-21 and 24 is/are pending in the application.
- 4a) Of the above claim(s) 7,11,18,22,23 and 25-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8-10,12,14-17,19-21 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/15/05
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-6, 8, 10, 12, 14-17, 19-21 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nurmi (6,608,251) in view of Creze and Chen.

Nurmi, Figs. 2a-3a show a conductor 20 comprising a series of arch-shaped elements that are continuously formed with one another and extend along a centerline (not labeled). In absence of any showing of criticality by applicant, to form the arch-shaped elements are pitched at an acute angle with respect to the centerline would have been obvious of modification since such change solves no stated problem. It is noted that the arch-shaped elements are pitched at an acute angle with respect to the centerline are old and well known in the art. For example, Creze, Figs. 3A-3C show arch-shaped elements 13 of a conductor 4 being pitched at an acute angle with respect to the centerline.

As to claim 3, Nurmi shows the arch-shaped elements are arranged in separate parallel planes that are oriented at an acute angle with respect to the centerline.

As to claim 4, Nurmi shows each said arch-shaped element includes a pair of opposed leg portions having first ends jointed to a bridge portion and having second ends spaced apart to form an opening therebetween.

Art Unit: 2833

As to claim 5, Nurmi shows each the arch-shaped element has leg portion provided along opposite sides of the contact, and the leg portions of adjacent arch-shaped elements are joined to one another at linking portions.

As to claim 6, the arch-shaped elements have leg portions, the leg portions of adjacent arch-shaped element being joined to one another on alternating sides of the arch-shaped elements.

As to claim 8, the arch-shaped elements and the centerline are arranged in a linear geometry.

As to claim 10, each arch-shaped element includes a bridge portion and leg portions, the leg portions being separated to provide an open bottom.

As to claim 12, 14-17, 19-21 and 24, the claims have substantially similar features as claims 1-6, 8 and 10; therefore they are rejected under the similar rationale.

As to claim 9, Nurmi does not show the conductor having a latch and tab members at opposite ends. Chen, Fig. 1 shows a conductor 12 having latch and tab numbers 16, 18 at opposite ends. It would have been obvious to one with skill in the art to modify the connector of Nurmi by forming the conductor with latch and tab members at opposite ends, as taught by Chen, in order to provide connections for the conductor. It is noted that the latch member could be jointed to the tab member when hook ends of the latch are inserted in a hole of the tab 18.

3. Applicant's arguments with respect to claims 1, 3-6, 8, 10, 12, 14-17, 19-21 and 24 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2833

4. Soreny, Neidecker et al. and Pohl are cited for disclosure of electrical connector having arch-shaped elements pitched at an acute angle.
5. Any inquiry concerning this communication should be directed to Hien D. Vu at telephone number 571-272-2016.

HV

9/30/05


HIEN VU
PRIMARY EXAMINER